WHAT IS CLAIMED IS:

1. A heat exchanger for cooling air comprising tubes through fluid flows, wherein the tubes are disposed such that outer surfaces of the tubes are generally exposed to the air, wherein the tubes have streamlined-shaped cross-sections so that air flows along the outer surfaces of the tubes.

2. The heat exchanger according to claim 1, wherein the tubes are arranged in row in a staggered configuration.

3. The heat exchanger according to claim 1, wherein each of the tubes is formed with a plurality of passages through which the fluid flows, wherein a most-downstream passage with respect to an air flow direction has a cross-section of a flow area greater than that of a most-upstream passage.

4. The heat exchanger according to claim 1, wherein the streamlined-shaped cross-section is symmetric with respect to its longitudinal centerline.

5. The heat exchanger according to claim 1, wherein the tubes are coated with a defrosting agent that restricts adhesion of frost particles.

6. The heat exchanger according to claim 1, wherein the tubes are coated with a water repellent.

7. The heat exchanger according to claim 1, wherein the tubes are corrugated in directions perpendicular to an air flow direction.

8. A heat exchanger for cooling air comprising a flat tube through which fluid flows, wherein the tube has an outer surface generally exposed to the air, wherein the tube is arranged such that a longitudinal centerline of its cross-section is parallel to an air flow direction and is corrugated in a direction perpendicular to the air flow direction.

9. The heat exchanger according to claim 8, wherein the tube has substantially an elliptic-shaped cross-section.

10. The heat exchanger according to claim 8, wherein the tube has a streamlined-shaped cross-section so that air flows along the outer surface.

11. The heat exchanger according to claim 10, wherein the streamlined-shaped cross-section is symmetric with respect to the longitudinal centerline of the cross-section.

12. The heat exchanger according to claim 8, wherein a dimension of the cross-section of the tube in a direction perpendicular to the air flow direction is maximum at substantially an air midstream position and reduces toward an air downstream position of the tube.

13. The heat exchanger according to claim 8, wherein the tube is formed with a plurality of passages through which fluid flows, wherein a most-downstream passage with respect to the air flow direction has a cross-section of a flow area greater than that of a most-upstream passage.

14. The heat exchanger according to claim 8, further comprising tanks connected at ends of the tube.

15. The heat exchanger according to claim 8, wherein an outer surface of the tube has water repellency.